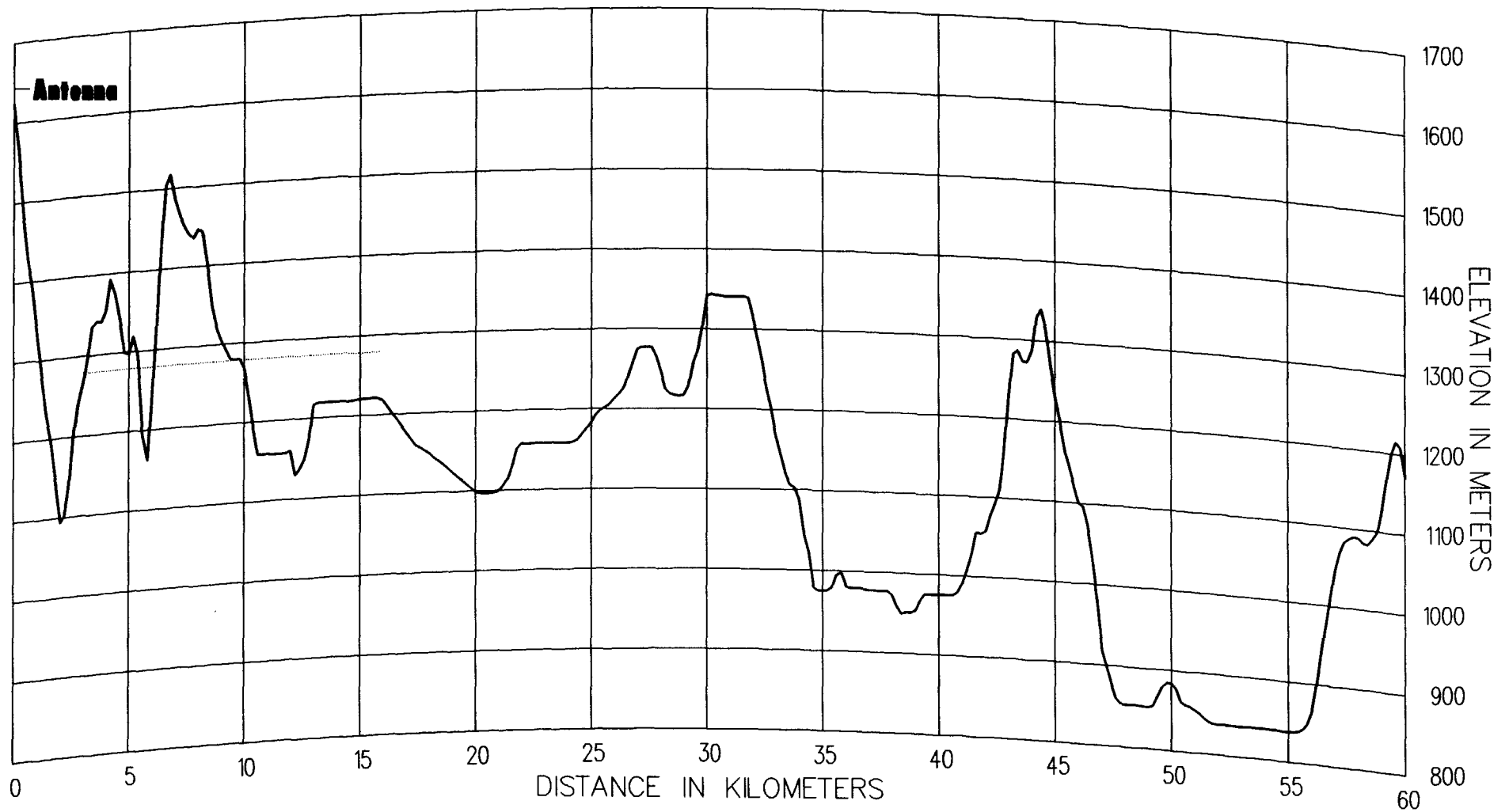


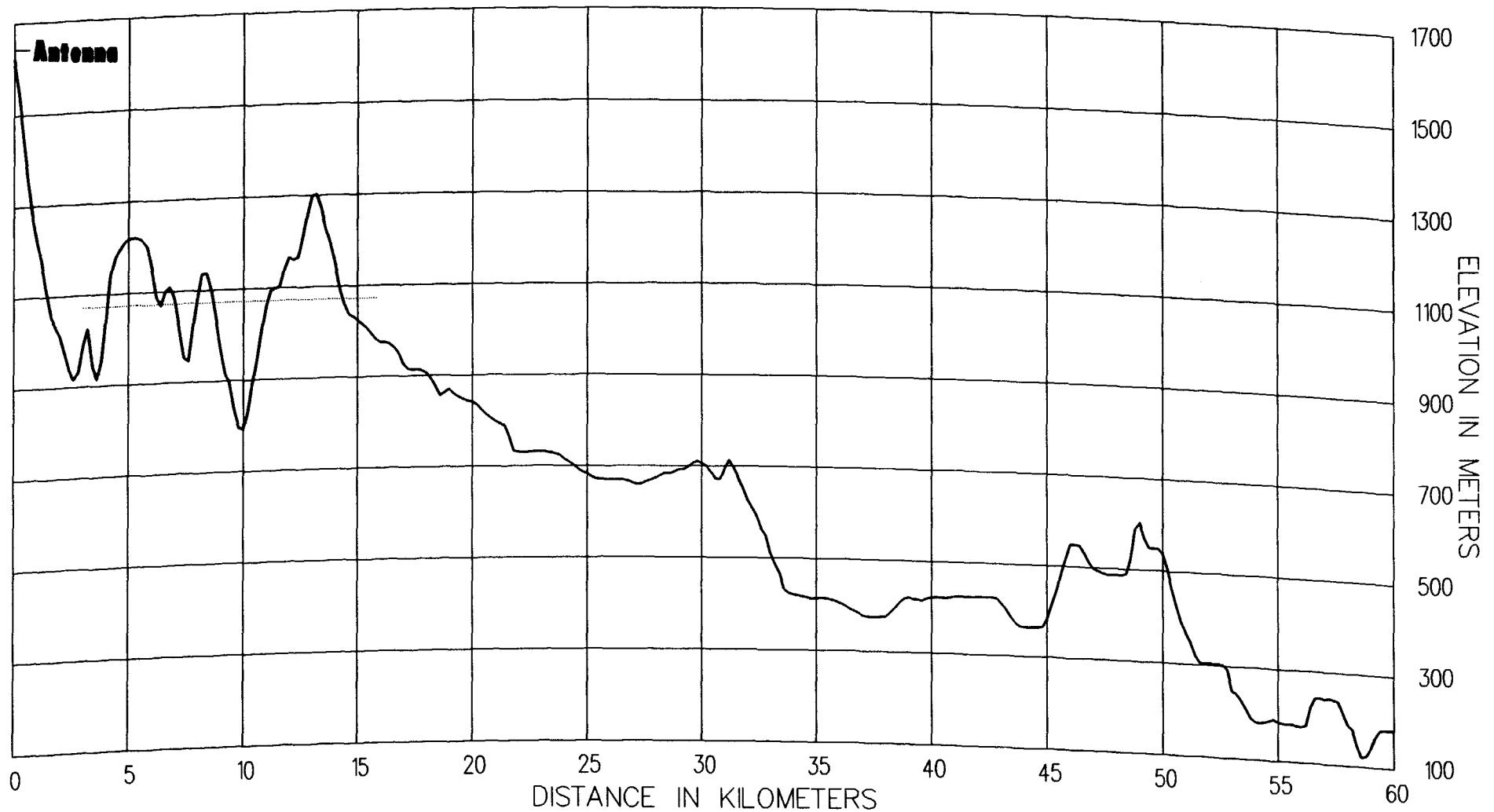
Average Radial Elevation 1278.85 Meters AMSL  
Antenna Radiation Center 1644.10 Meters AMSL



N 180.0 E Radial  
KAY SADLER-GILL

**EXHIBIT E-6F**

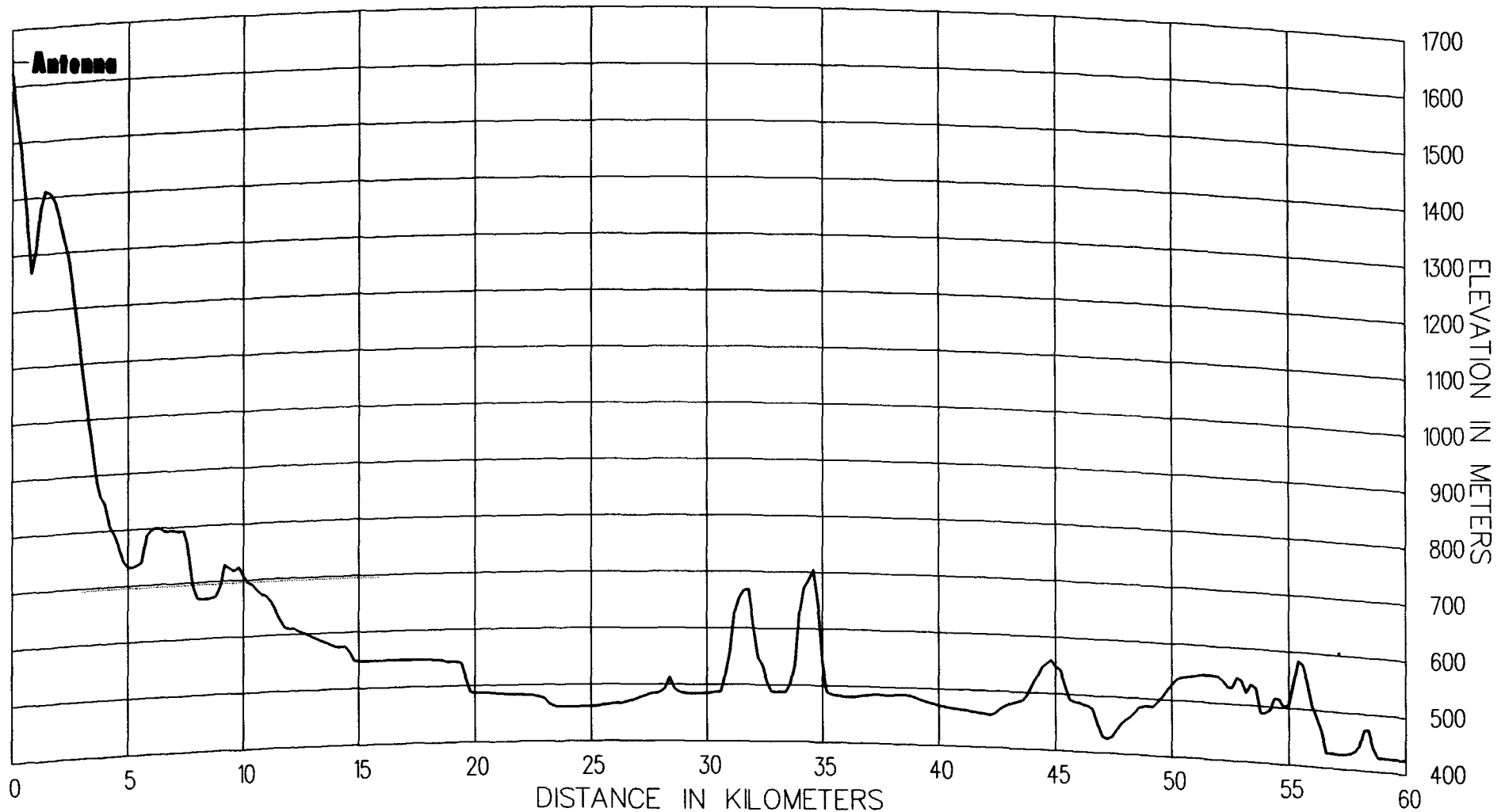
Average Radial Elevation 1072.71 Meters AMSL  
Antenna Radiation Center 1644.10 Meters AMSL



N 225.0 E Radial  
KAY SADLER-GILL

## EXHIBIT E-6G

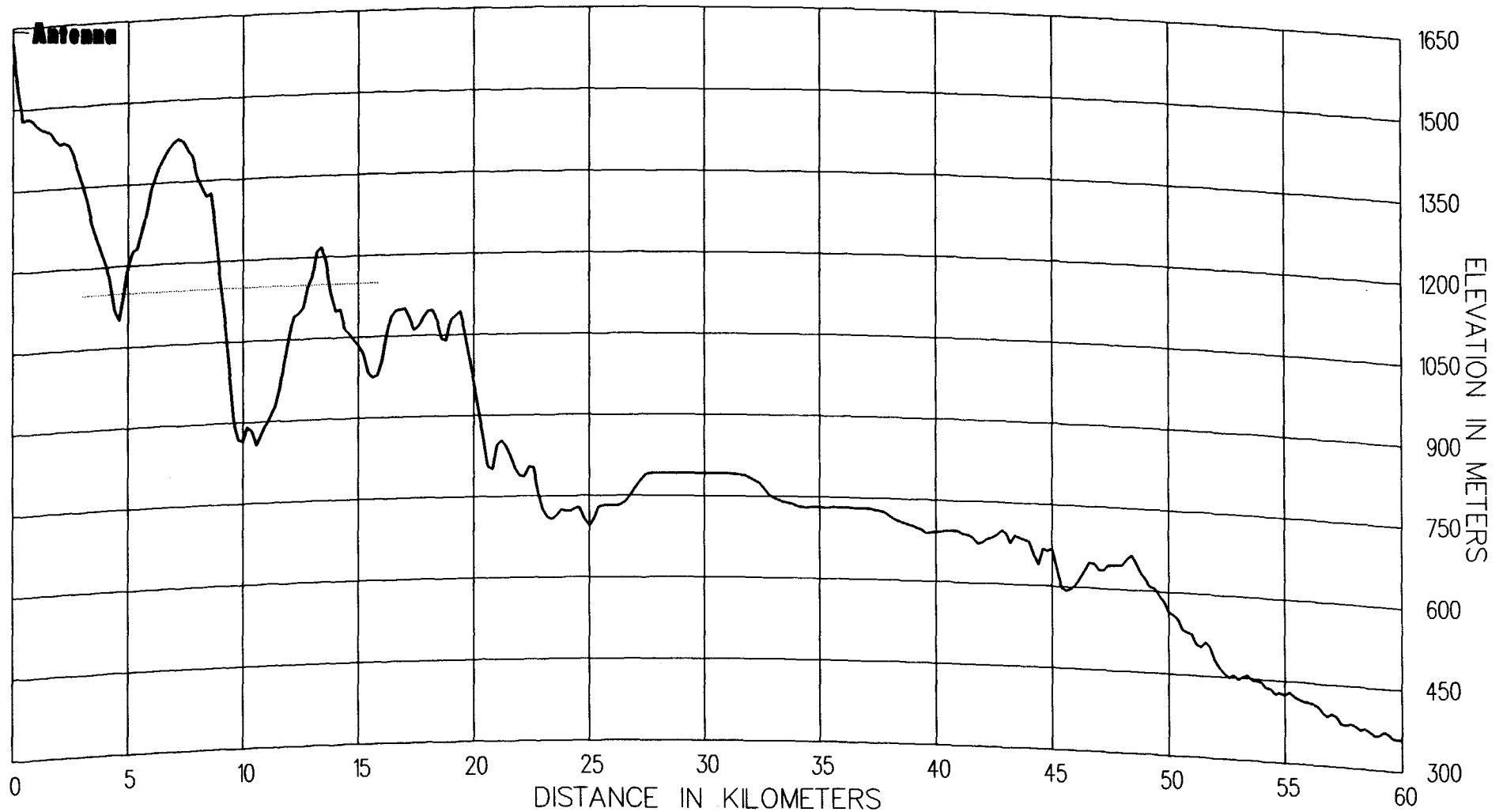
Average Radial Elevation 695.64 Meters AMSL  
Antenna Radiation Center 1644.10 Meters AMSL



N 270.0 E Radial  
KAY SADLER-GILL

## EXHIBIT E-6H

Average Radial Elevation 1149.20 Meters AMSL  
Antenna Radiation Center 1644.10 Meters AMSL



N 315.0 E Radial  
KAY SADLER-GILL

## EXHIBIT E-6I

## **EXHIBIT E-7 ENVIRONMENTAL CONSIDERATIONS**

### **I. DISCUSSION**

The applicant, Kay Sadlier-Gill, has obtained permission to situate an FM broadcast antenna and supporting structure on a parcel of land within U.S. Forest Service property. The site is located at the west end of Double View Drive, 3.41 kilometers (2.12 miles) southwest of the center of Idyllwild, California, within Riverside County. The ground elevation of the site is 1621.5 meters (5320 feet) above mean sea level.

The tower and antenna will consist of a 25.9 meter (85 feet) guyed steel tower supporting an Electronics Research, Inc., model 200-3AE three-bay circularly-polarized nondirectional FM broadcast antenna. The antenna radiation center will be 22.6 meters above ground. The transmitting equipment will be housed in a small concrete block building to be constructed near the base of the tower.

### **II. NON-IONIZING RF RADIATION**

In accordance with the requirements of the FCC Public Notice dated November 14, 1985, entitled Environmental Processing Rules For Broadcasting, the worst-case power density in  $\text{mW}/\text{cm}^2$  has been calculated using equation four of Section II of the Office of Science & Technology Bulletin No. 65 entitled, Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radiofrequency Radiation. Equation four has been reduced so the constant reflects both the factor 1.64 used to obtain ERP relative to EIRP and the factor 1000 for the number of milliwatts/watt. Further consideration includes the Environmental Protection Agency (EPA) recommendation that a more realistic approximation should include ground reflection by assuming a maximum 1.6-fold increase in field strength or an increase in power density of  $1.6^2$  (2.56).

Therefore,

$$S_{mW/cm^2} = \frac{0.10496 \cdot (ERP_h + ERP_v)}{\pi \cdot R^2}$$

$$S_{mW/cm^2} = \frac{0.10496 \cdot (2300)}{\pi \cdot 22.6^2}$$

$$S_{mW/cm^2} = 0.1504 \text{ mW/cm}^2 \quad (150.4 \text{ } \mu\text{W/cm}^2)$$

$$S_{mW/cm^2} = \text{Power Density in milliwatts/centimeter}^2$$

$$ERP_h = 1,150 \text{ watts max, horizontally-polarized ERP}$$

$$ERP_v = 1,150 \text{ watts max, vertically-polarized ERP}$$

$$R = 22.6 \text{ meters from antenna radiation center to tower base}$$

The American National Standards Institute (ANSI) has established a maximum power density exposure limit of 1.0 mW/cm<sup>2</sup> averaged over any six-minute period, for radio frequency radiation in the band from 30 to 300 Megahertz.

In the aforementioned report, reference is made to studies conducted by the EPA in which a mathematical model of antenna behavior was developed to predict the required distance from the antenna radiation center to the bottom of the antenna supporting structure so the ANSI limit will not be exceeded anywhere on the ground. By interpolation of tabulated values in appendix B, table 1 of the report, it was determined that a maximum worst-case distance of 8.8 meters would be required assuming a single dipole element with an effective radiated power of 2.30 kilowatts (the sum of horizontally and vertically polarized power), and a distance of 3.3 meters using typically available three-bay broadcast antennas.

Figure 1 graphically represents the predicted power density two meters above ground as a function of horizontal distance from the base of the proposed tower. The figure shows that the proposed facility will produce a worst-case power density that is well below the standard.

Protection to station workers and the general public will be accomplished in two ways. First, the entire antenna supporting structure will be surrounded with a chain link fence topped with razor wire to discourage casual public access to the broadcast facilities. To warn the public of possible radio frequency radiation danger, the applicant will liberally mark the fence around the facility with warning signs that comply with the ANSI standard C95.2-1982 Radio Frequency Radiation Hazard Warning Symbol.

Second, when maintenance is to be performed on the antenna or supporting structure, the station will cease operation until the worker is no longer on the tower.

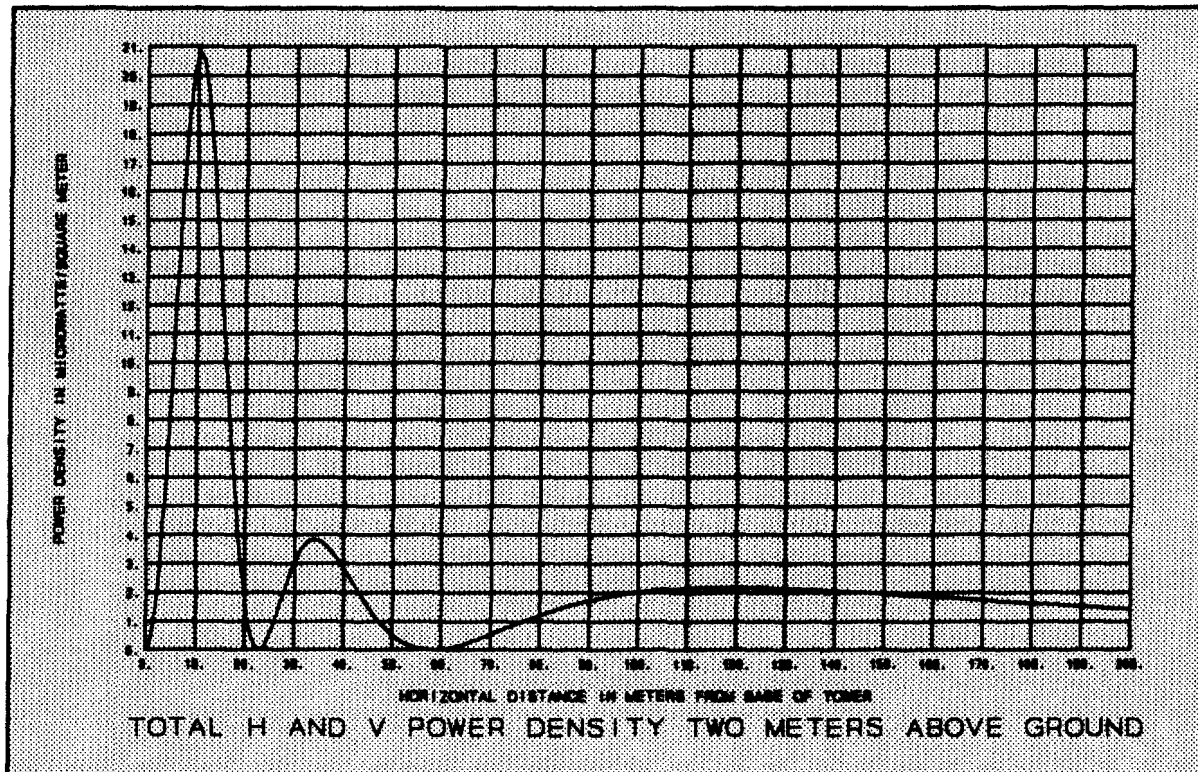


Figure 1

### III. CONCLUSIONS

- No underground cable or waveguide is proposed.
- Human exposure to radio frequency radiation will not exceed the maximum level established by the American National Standards Institute (ANSI) based on predictions employing the vertical radiation characteristics of a three-bay  $\lambda$ -spaced element antenna.
- The property has not been officially designated as wilderness area, nor to the applicant's knowledge, is it under consideration for such designation.
- The applicant will comply with environmental requirements of local, state and federal governmental agencies.
- The site is not located in a floodplain.
- The site has not been locally or nationally recognized for its special scenic or recreational value.

- The site is not located in an officially designated wildlife preserve nor to the applicant's knowledge, is it pending consideration for such designation.
- The property is not listed in the National Register of Historic Places nor to the applicant's knowledge, is it eligible for listing.
- The proposed facilities will not affect threatened or endangered species or designated critical habitats as determined by the Secretary of the Interior pursuant to the Endangered Species Act of 1973.
- The proposed facilities will not affect any known Indian religious sites.
- Construction of the proposed facilities will not involve significant changes to surface features.

Therefore, it is concluded that the proposed operation will not significantly affect the quality of the human environment and that an environmental assessment as described in Part 1, Subpart I, of the Commission's Rules is not required. Furthermore, the proposed facility is not classified as having a significant impact upon the environment as defined in §1.1305 and §1.1307 of the Commission's Rules and Regulations.

**Lawrence L. Morton, P.E.**  
**Consulting Telecommunications Engineer**  
**February 15, 1993**

EXHIBIT E-4

CENTER OF MAP:  
N LAT 33 42' 00.00"  
W LON 116 53' 00.00"

Scale 1: 482,528

PROPOSED 70 AND 60 DBU SERVICE CONTOURS  
FROM FCC F(50,50) PROPAGATION CURVES  
COMPUTED ALONG 300 BEARINGS  
AND EXTENT OF TERRAIN SHIELDING

KILOMETERS  
0 5 10 15 20

STATUTE MILES  
0 5 10 15 20

**LMA** **LAWRENCE L. MORTON ASSOCIATES**  
Telecommunications Engineers  
Mesa Oaks, California

PROPOSED 60 DBU CONTOUR

PROPOSED 70 DBU CONTOUR

**CENTER OF MAP:**  
N LAT 33 42' 00.00"  
W LON 116 53' 00.00"

**Scale 1: 462,528**

**PROPOSED 70 AND 60 DBU SERVICE CONTOURS FROM FCC F(50,50) PROPAGATION CURVES COMPUTED ALONG 300 BEARINGS AND EXTENT OF TERRAIN SHIELDING**

**LAWRENCE L. MORTON ASSOCIATES**  
Telecommunications Engineers  
Mesa Oaks, California

**PROPOSED 60 DBU CONTOUR**

**PROPOSED 70 DBU CONTOUR**

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**LAWRENCE L. MORTON ASSOCIATES**  
Telecommunications Engineers  
Mesa Oaks, California

**PROPOSED 60 DBU CONTOUR**

**PROPOSED 70 DBU CONTOUR**

Fontana  
Loma Linda  
Redlands  
Yucca  
Forest Falls  
Grand Terrace  
Riverside  
Moreno Valley  
Moreno  
Beaumont  
Arlington  
May  
Arlington Station  
Home Gardens  
Glen Valley  
El Cerrito  
Alberhill  
Romolando  
Sun City  
Quail Valley  
Lake Esimore  
Lakeland Village  
San Juan Hot Springs  
Murrieta  
Temecula  
Rainbow  
Fallbrook  
Pala  
Pala Mesa  
San Luis Rey Heights  
Lakeview  
Lakeview Hot Springs  
Parris  
New River  
Jupiter Springs  
Hemet  
East Hemet  
San Jacinto  
Mountain Center  
Escondido  
Carlsbad  
Palm Desert  
Bakers Wells  
La Quinta  
Huntington  
Palm Springs  
Myoma  
Thousand Palms  
Imperial City

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KILOMETERS  
0 5 10 15 20  
STATUTE MILES  
0 5 10 15 20

**LMA**  
**LAWRENCE L. MORTON ASSOCIATES**  
Telecommunications Engineers  
Mesa Oaks, California

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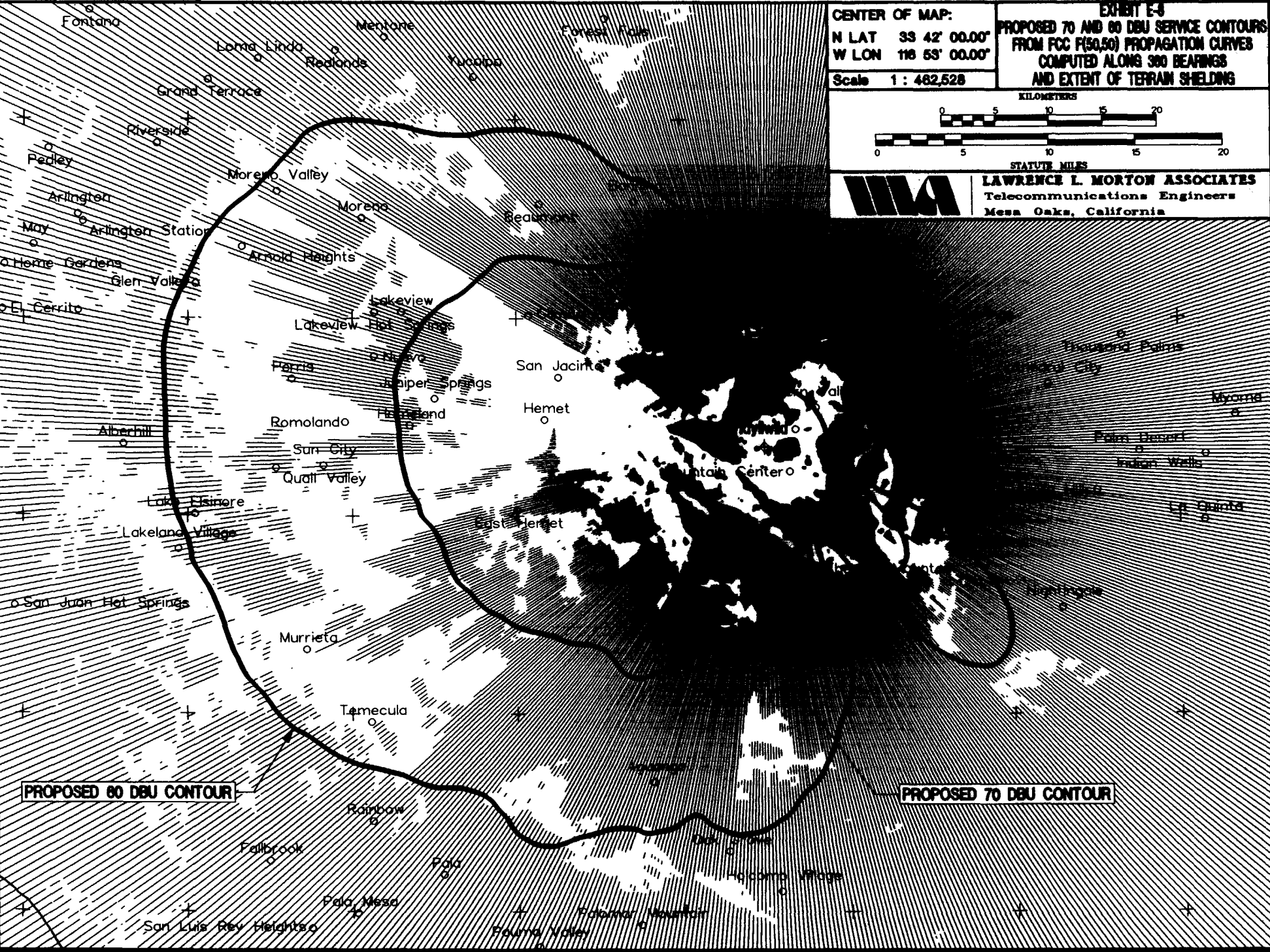
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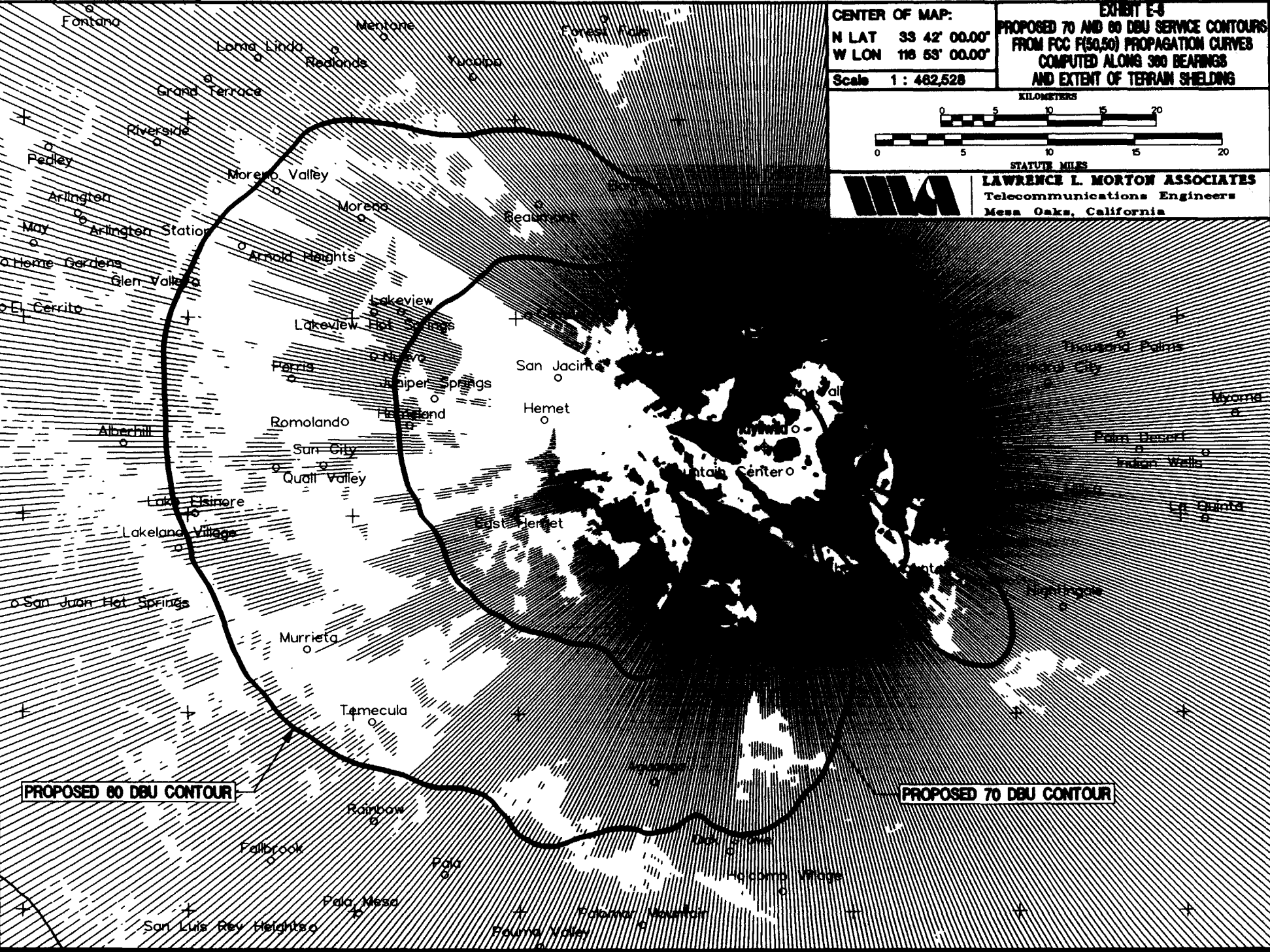
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Telecommunications Engineers  
Mesa Oaks, California

**PROPOSED 60 DBU CONTOUR**

**PROPOSED 70 DBU CONTOUR**

**CERTIFICATE OF SERVICE**

I, Beverles Jenkins, a secretary in the law firm of Brown, Nietert & Kaufman, Chartered, do hereby certify that on this 19th day of February, 1993, I caused copies of the foregoing "Petition For Leave To Amend" to be delivered by first class mail, postage prepaid, to the persons named below:

\* Honorable Walter C. Miller  
Administrative Law Judge  
Federal Communications Commission  
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Washington, D.C. 20036


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Hearing Branch  
Enforcement Division  
Mass Media Bureau  
Federal Communications Commission  
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\* Chief, Data Management Staff  
Audio Services Division  
Mass Media Bureau  
1919 M Street, N.W., Room 350  
Washington, D.C. 20554

  
Beverles Jenkins

\* Via Hand Delivery

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